



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,328

12/08/2006

Ralf Schaefer

PF030154

5872

24498

7590

09/30/2008

Joseph J. Laks

Thomson Licensing LLC

2 Independence Way, Patent Operations

PO Box 5312

PRINCETON, NJ 08543

EXAMINER

AGA, SORI A

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

09/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,328	Applicant(s) SCHAEFER ET AL.	
	Examiner SORI A. AGA	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/31/2006; 12/08/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-7 are objected to because of the following informalities: **Independent claim 1** should begin with “A method”; Independent claim 6 should begin with “A device”; and Independent claim 7 should begin with “A Descriptor”. Similarly, Dependent **claims 2-5** should begin with “The method”. Appropriate correction is required.

Claims 6 and 7 recite “an networks information table” in lines 5-6 and 2-3 respectively. The recitations should be corrected to read "a Networks Information Table".

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "Descriptor of a service" is an abstract idea. As such, the subject matter of the claim is not patent eligible. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. An abstract idea does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine,

Art Unit: 2619

not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1- rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the information" in line 16. There is insufficient antecedent basis for this limitation. For examination purposes, it is interpreted to mean information held in the NIT table and the SDT tables.

Claim 1 recites "IP transmission address" in line 5, "this IP address in lines 6-7, "IP transmission addresses" in line 11 and "said IP addresses" on line 13. It is unclear whether some/all said IP addresses are the same or different from each other.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2619

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao (US 2004/0187161) (herein after Cao).

Regarding claim 1, Cao teaches a method of discovery, by a terminal connected to an Internet Protocol (IP) type network, of Digital Video Broadcast (DVB) services on the IP type network, wherein where_in it comprises the following steps [see **Paragraph 0041 lines 10-11 where a video broadcasting based on DVB is shown and Paragraph 0046 line 3 where the DVB NIT is delivered via an IP method**];

the terminal uses a first IP transmission address and a first port number to receive a transport stream transmitted to this IP address on this port [see **paragraph 0046 lines 10-13 where the set-top box (terminal) is configured to receive the IP address and port number in order to receive said IP communication**];

the terminal extracts from the said stream at least the networks information table (NIT) [see **paragraph 0047 lines 12-13 where the set-top box receives the auxiliary NIT and parses the NIT**]

the descriptors of networks contained in the said networks information table designating IP transmission addresses and the associated ports [see **item '304' in figure 3 and paragraph 0039 line 8 where the auxiliary NIT table includes IP address and Port number**],

Art Unit: 2619

Cao also teaches the terminal connects to at least part of the transport streams transmitted to the said IP addresses on the said ports [see **paragraph 0047 lines 6-11 where the receiver that knows (have learnt) the IP address and port number periodically checks for updated information (connects so as to read for updated information)**]; However, Cao does not explicitly teach reading the associated service description table (SDT); and that the terminal uses this information to construct a possibly unitary list of the services available on the network.

However, Crocitti teaches a database creation procedure where a receiving device extracts an NIT table which contains the list of services offered and SDT table in order to construct databases based on the information [see **paragraph 0028 lines 7 and lines 27-42**]. It would have been obvious for a person having ordinary skill in the art to read the associated service description table (SDT); use this information to construct a possibly unitary list of the services available on the network. This is desirable because it allows the rapid installation of digital decoders tailored to a horizontal market.

Regarding claim 2, Cao teaches the method of claim 1 where the first IP transmission address and the first port number are entered by the user [see **paragraph 0046 line 11 where the IP address and port number are configured by the distributor (user)**].

Regarding claim 5, Cao teaches the method according to claim 1 where the list of services is included in the NIT contained in the stream available at the first IP transmission address on the first port [See **paragraph 0046 lines 10-13 where the set-**

Art Unit: 2619

top box (terminal) is configured to receive the first IP address and port number in order to receive the auxiliary NIT and also see Paragraph 0051 lines 3-8 where program association information is found in the received NIT table including PAT, PMT and PID-program identifiers (list of services)].

Regarding claim 6, Cao teaches a device possessing means to connect to an Internet Protocol (IP) transmission address via means of connection to an IP network and means of decoding of Digital Video Broadcast (DVB) streams transmitted to this IP transmission address **see Paragraph 0041 lines 10-11 where a video broadcasting based on DVB is shown; and see paragraph 0046 lines 10-13 where the set-top box (terminal) is configured to receive the IP address and port number in order to receive said IP communication; and see fig 7 and paragraph lines 1-2 where ‘Device-136’ which includes an ‘NIT parser’ and ‘Decryption processor’ is shown]**, wherein the means of decoding of DVB streams have the capacity to analyze a networks information table (NIT) extracted from the stream, containing network descriptors suitable for the IP network **[see paragraph 0047 lines 12-13 where the set-top box receives the auxiliary NIT and parses the NIT; and see paragraph 0036 lines 10-11 and page 3 TABLE 1 where the NIT is shown to include network descriptors]** However, Cao does not explicitly teach connecting to each IP transmission address described in the said NIT so as to read therefrom a DVB stream and extract therefrom the information on the services offered on the network.

However, Crocitti teaches a method by which a receiving DVB device extracts an NIT table which contains the list of services offered including Service Description Table in

Art Unit: 2619

order to construct databases based on the information [see **paragraph 0028 lines 7 and lines 27-42**]. It would have been obvious for a person having ordinary skill in the art to extract an NIT table and so as to read therefrom a DVB stream and extract therefrom the information on the services offered on the network in order to use this information to construct a services database which is desirable because it allows the rapid installation of digital decoders tailored to a horizontal market.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao as applied to claims 1, 2, 5 and 6 above, and further in view of Van Willingen (US 7,386,879) (herein after Van Willingen).

Regarding claim 3, however, Cao does not explicitly teach the first IP address and the first port number are obtained from the network by the terminal. However, Van Willingen, in the same field of endeavor teaches [see **column 4 lines 44-47 where a terminal in a DVB system sends a DHCP request to obtain an IP message**]. It would have been obvious for a person having ordinary skill in the art to enable the terminal automatically acquire an IP address and port number in order to allow a new terminal to be added to the network with no need for manual configuration.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao as applied to claims 1, 2, 5 and 6 above, and further in view of Ludvig et al. (US 2003/0233451) (herein after Ludvig).

Art Unit: 2619

Regarding claim 4, Cao teaches the method according to claim 1 as discussed above.

However, Cao does not explicitly teach a stream that contains only a single DVB service.

However, Ludvig in the same field of endeavor teaches streams that contain only a single DVB service [see **paragraph 0053**]. It would have been obvious for a person having ordinary skill in the art to make each stream contain only a single service for a better system efficiency achieved by the one-to-one correlation between a transport stream ID and a single service which enables program (service) selection according to a user's preference.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao as applied to claims 1, 2, 5 and 6 above, and further in view of Lahr (US 7013,322) (herein after Lahr).

Regarding claim 7, Cao teaches a descriptor of a service for transmitting a Video Broadcast (DVB) stream intended to be included in a network information table wherein it contains the Internet Protocol (IP) transmission address and a port number on which the said server transmits a DVB stream over an IP type network [see **Paragraph 0041 lines 10-11 where a video broadcasting based on DVB is shown and Paragraph 0046 line 3 where the DVB NIT is delivered via an IP method ; and see item '304' in figure 3 and paragraph 0039 line 8 where an auxiliary NIT table transmits descriptors including IP address and Port number**].

Art Unit: 2619

However, Cao does not explicitly teach an IP address and a port number of a stream server. However, Lahr teaches using IP address and port of stream server for distributing stream media including video [see **column 11 lines 38-39**]. It would have been obvious for a person having ordinary skill in the art to include the IP address and port number of a stream server in order to be included in a local database (table). This is desirable because it allows a device to have quick access to network information that is needed in response to a user selecting a specific program supported by said stream server.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SORI A. AGA whose telephone number is (571)270-1868. The examiner can normally be reached on M-Th 7:30-5:00, F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571)272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. A./

Examiner, Art Unit 2619

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619